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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,552	12/14/1999	DAVID L. DEAN, JR.	HE0083	2615

21495 7590 04/09/2003

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EXAMINER

AMARI, ALESSANDRO V

ART UNIT PAPER NUMBER

2872

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/460,552

Applicant(s)

DEAN, JR. ET AL.

Examiner

Alessandro V. Amari

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 5, 6 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Edwards et al. U.S. Patent 5,926,596.

In regard to claim 1, Edwards et al. discloses (see Figures 4 and 5) a ferrule comprising at least one optical fiber bore (34) associated with a front surface (42) and a rear surface (44) of said ferrule as shown in Figures 4 and 5; first and second body portions (12, 14) extending at least partially between said surfaces as shown in Figures 4 and 5 and having respective widths as described in column 5, lines 60-61 and column 6, lines 53-56, a juncture of said body portions comprising an interface in the form of a parting line (i.e., where two body portions join) as shown in the lower portions of Figures

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4 and 5, said parting line and said optical fiber bore extending longitudinally at least partially between said front surface and said rear surface as shown in the lower ends of Figures 4 and 5, and said parting line defining an offset of at least about 50 microns between first and second body portions as described in column 5, lines 60-61 and column 6, lines 53-56.

Regarding claim 5, Edwards et al. discloses that said parting line comprising a ledge as shown in lower portions of Figures 4 and 5.

Regarding claim 6, Edwards et al. discloses (see Figure 5) that said ferrule comprising multiple bores (34, 54) and defining a multifiber ferrule as shown in Figures 4 and 5.

In regard to claim 18, Edwards et al. discloses (see Figures 4 and 5) a ferrule comprising at least one optical fiber bore (34) extending from a front surface (42) to a rear surface (44) of said ferrule as shown in Figures 4 and 5; a shaft portion defining exterior surfaces of said ferrule as shown in Figure 4, said exterior surfaces at least partially extending longitudinally between said front and rear surfaces as shown in Figure 4; and a width transition, said width transition extending longitudinally along a portion (see lower portion of Figures 4 and 5), said ferrule shaft portion, said width transition comprising a width offset as shown in lower portion of Figures 4 and 5.

Allowable Subject Matter

3. Claims 17, 19 and 20 are allowed.

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4. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 2-4 are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "the width of said first ferrule body portion is defined to within a first tolerance, and wherein the width of said second ferrule body portion is defined to within a second tolerance that is larger than the first tolerance" as set forth in the claimed combination.

Claim 17 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "the width of said first ferrule body portion is defined to within a first tolerance, and the width of said second ferrule body portion is defined to within a second tolerance that is larger than the first tolerance" as set forth in the claimed combination.

Claim 19 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "the width of one of said surfaces being defined to within a first tolerance, and the width of the other of said at least two surfaces being defined to within a second tolerance that is larger than the first tolerance" as set forth in the claimed combination.

Claim 20 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "an exterior surface of the first body portion defined to within a first tolerance, and an exterior surface of the second body portion defined to

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within a second tolerance that is larger than the first tolerance" as set forth in the claimed combination.

The prior art of record, Edwards et al. teaches a multifiber ferrule comprising two optical fiber bores with front and rear surfaces and first and second body portions extending at least partially between said surfaces with a juncture of said body portions comprising an interface in the form of a parting line wherein said parting line and said optical fiber bores extend longitudinally at least partially between said front surface and said rear surface and said parting line defining an offset of at least about 50 microns. However, Edwards does not teach the widths of the body portions being defined by specific tolerances and there is no motivation or teaching to modify this difference as derived.

Response to Arguments

6. The argument filed on 09 January 2003 have been fully considered but are unpersuasive.

The applicant argues that the prior art, teaches a alignment ferrule with a sole parting line formed between the alignment block 12 and the overmolded body portion 14 and that it requires that the parting line be disposed transversely to the fiber channels and since the remainder of the alignment block is overmolded this transversely disposed parting line is the sole parting line of the alignment ferrule. However, the claimed invention recites that the parting line and the optical fiber bore extend longitudinally between at least a portion of the front surface and the rear surface of the ferrule.

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In response to this argument, the Examiner would like to point out that the limitation "a parting line" is not an actual physical structure of the ferrule but is a geometrical or virtual construct in order to describe the relationship between the first and second body portions. In a similar fashion, given the broadest reasonable interpretation, the ferrule of Edwards et al can plausibly read on the current claim language. If one examines, Figures 4 and 5 of Edwards et al, it is possible to interpret the juncture of the two body portions (12 and 14) comprising an interface in the form of a parting line, wherein said parting line and said optical fiber bore extend longitudinally at least partially between front surface and rear surface and that said parting line defines an offset of at least 50 microns between said first and second body portions (see Edwards et al., column 5, lines 60-62 and column 6, lines 53-56 for dimensions). In order to illustrate this reading based upon the current claim limitations, the Examiner has attached an annotated version of sheet 1 of 4 of US 5,926,596 showing how the limitations read on Figures 4 and 5.

Applicant further argues that for the same reasons as above, the prior art does not teach all of the elements of claim 18.

In response to this argument, the Examiner refers the Applicant to the response above and to annotated version of sheet 1 of 4 of US 5,926,596 showing how the claim limitations of the shaft portion, width transition and width offset read on Figures 4 and 5.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (703) 306-0533. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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ava *ava*
April 4, 2003

A handwritten signature in black ink, appearing to read 'Audrey Chang', is written over a large, faint, circular watermark or stamp.

Audrey Chang
Primary Examiner
Technology Center 2800

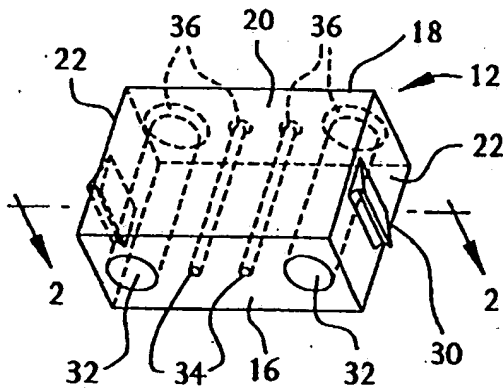


FIG. 1

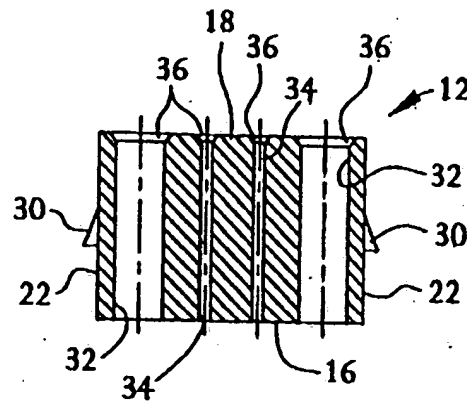


FIG. 2

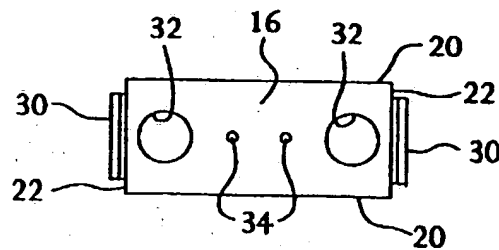


FIG. 3

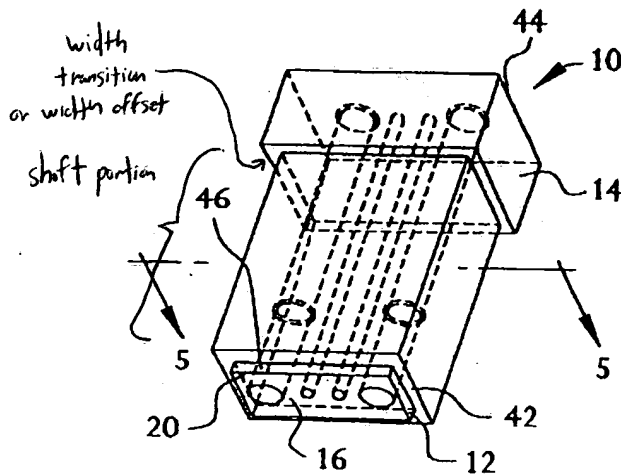


FIG. 4

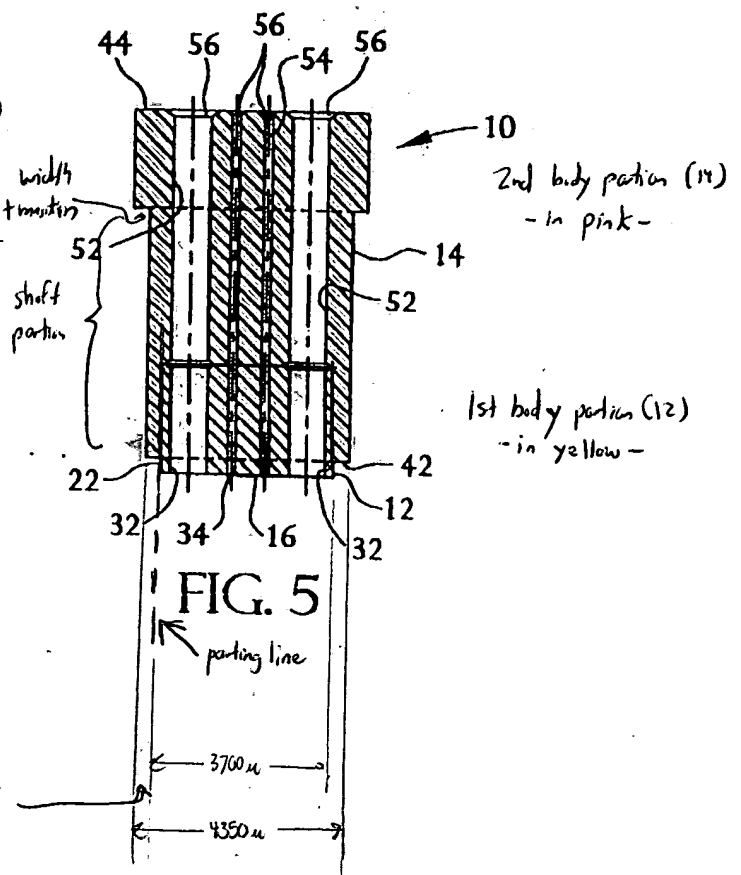


FIG. 5

$$\begin{array}{r} 4350 \\ - 3700 \\ \hline 650 \mu / 2 \\ = 325 \mu \end{array}$$